

Application No. 10/537729
Response to the Office Action dated July 21, 2008

REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

The specification has been amended editorially as described above.

Claim 1 has been amended to include limitations as supported by Figs. 1-3 and the specification at page 6, lines 24-27, page 7, lines 10-11, page 7, line 14 – page 8, line 1, and page 9, lines 1-2. Claim 4 has been amended as supported by the specification at page 8, lines 1-5. Accordingly, no new matter has been entered to the claims.

Claim 1, 3, 4, and 6-8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (U.S. Patent No. 6,512,603) in view of Furusawa et al. (U.S. Patent No. 6,357,903). Applicant respectfully traverses this rejection.

Saito discloses an image sensor apparatus that includes a light source (117) mounted in a separation wall (see Fig. 11). Saito, however, fails to disclose that the apparatus has two partition walls such as the first and second partition walls, where the first partition wall is contacting a principal surface of a substrate and separates a light source and sensor IC chips as claim 1 requires. In addition, the light source of Saito is mounted on the separation wall (see Fig. 11), and Saito fails to disclose that the light source is mounted on the end of the principal surface of the substrate in a primary scanning direction as claim 1 requires. Accordingly, claim 1 is distinguished from Saito also for the above reasons.

Further, the separation wall of Saito is tilted (see Fig. 11). Dependent claim 4 requires that the second partition include a flat surface extending parallel to the principal surface of the substrate. Accordingly, claim 4 also is distinguished from Saito.

Furusawa discloses a line type illuminator including a light sensor (7), which is mounted on a surface of a substrate (8), a light guide (4), and a light source (10), which is mounted at the end of the light guide (see Figs. 1 and 2). However, Furusawa fails to

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disclose that the apparatus has two partition walls as claim 1 requires, and accordingly, Furusawa fails to disclose that one of the two partition walls is contacting the principal surface of the substrate and separates the light source and the sensor IC chips and that the other wall is spaced from the substrate and separates the light guide and the sensor IC chips as claim 1 requires. In addition, the light source of Furusawa is mounted at the end of the light guide and is not mounted on an end of the principal surface of the substrate as claim 1 requires. Instead of the light source, the light sensor is mounted on a surface of the substrate in Furusawa (Fig. 1). Moreover, Furusawa discloses a case (5) that is made of white resin, receives a light guide (4), and has high reflectivity (see Fig. 2 and coln. 5, line 66 -coln. 6, line 4). Even if the case (5) of Furusawa is considered as a reflector, Furusawa fails to disclose that the reflector is provided on the second partition wall as claim 1 requires. Thus, Furusawa does not remedy the deficiencies of Saito for claim 1.

In addition, Furusawa does not disclose that the second partition wall includes a flat surface extending parallel to the principal surface of the substrate as claim 4 requires. Thus, Furusawa does not remedy the deficiencies of Saito also regarding claim 4.

Accordingly, claims 1, 3, 4, and 6-8 are distinguished from Saito in view of Furusawa, and this rejection should be withdrawn.

Claim 11 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (U.S. Patent No. 6,512,603) in view of Furusawa et al. (U.S. Patent No. 6,357,903) and further in view of Onishi (Japanese Patent Application Publication No. 2000-125080). Applicant respectfully traverses this rejection.

Claim 1 and accordingly, claim 11 are distinguished from Saito in view of Furusawa for at least the same reasons as discussed for claim 1 above.

Onishi fails to disclose two partition walls, one of which is contacting a principal surface of the substrate and separates the light source and sensor IC chips, and the other of which is spaced from the substrate and separates a light guide and the sensor IC chips as claim 1 requires. Thus, Onishi also fails to disclose a reflector that is provided on the second partition wall as claim 1 requires.

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Accordingly, claim 11 is distinguished from Saito in view of Furusawa and further in view of Onishi, and this rejection should be withdrawn.

In view of the above, Applicant requests reconsideration of the application in the form of a Notice of Allowance.



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Respectfully submitted,

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